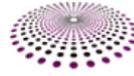


FluCov Epi-Bulletin – June 2022

*‘Combining data from around the world to understand
the impact of COVID-19 on influenza activity’*



Global **Influenza** Initiative

Commentary

Contents

It has been two years since a cluster of atypical pneumonia cases in Wuhan, China, was reported to the World Health Organization (WHO) (January 1, 2020) that was later linked to the new **SARS-CoV-2** virus. The FluCov Epi-Bulletin provides an overview of the number of positive cases of **influenza** and **SARS-CoV-2** and the percentage of specimens that tested positive from January 2019 onwards in 22 countries across most regions of the world (see [page 3](#)).

Results

At the end of 2021, increased **influenza** activity was seen in many countries included in this Bulletin [1]. The following patterns have been observed for **influenza** during the month of June:

- The number of overall reported **influenza** cases has decreased for most countries included in the Bulletin;
- **South Africa, Australia and China (probably)** are the only countries included in the Bulletin that reported an increase in **influenza** activity in June (note: the data for China are difficult to interpret as they are missing data for week 25);
- The decrease in new **influenza** cases reported in May in **Spain and Canada** has continued, but influenza activity was still ongoing in June in these two countries;
- Most **influenza** cases observed in June were **influenza A** (not subtyped or H3 – see WHO FluNet figure on page 2);
- No new **influenza** cases were reported in June for most Asian countries included in this Bulletin: **Japan, the Philippines, South Korea and Vietnam**;
- **Egypt, Italy and the United States** did not report **influenza** updates in June (week of last **influenza** update: 21, 17, and 20 respectively).

The overall number of reported **SARS-CoV-2** cases is now increasing again in many countries, probably due to the emergence of the Omicron BA.4 and BA.5 variants and the relaxation of non-pharmaceutical interventions (NPIs) [1].

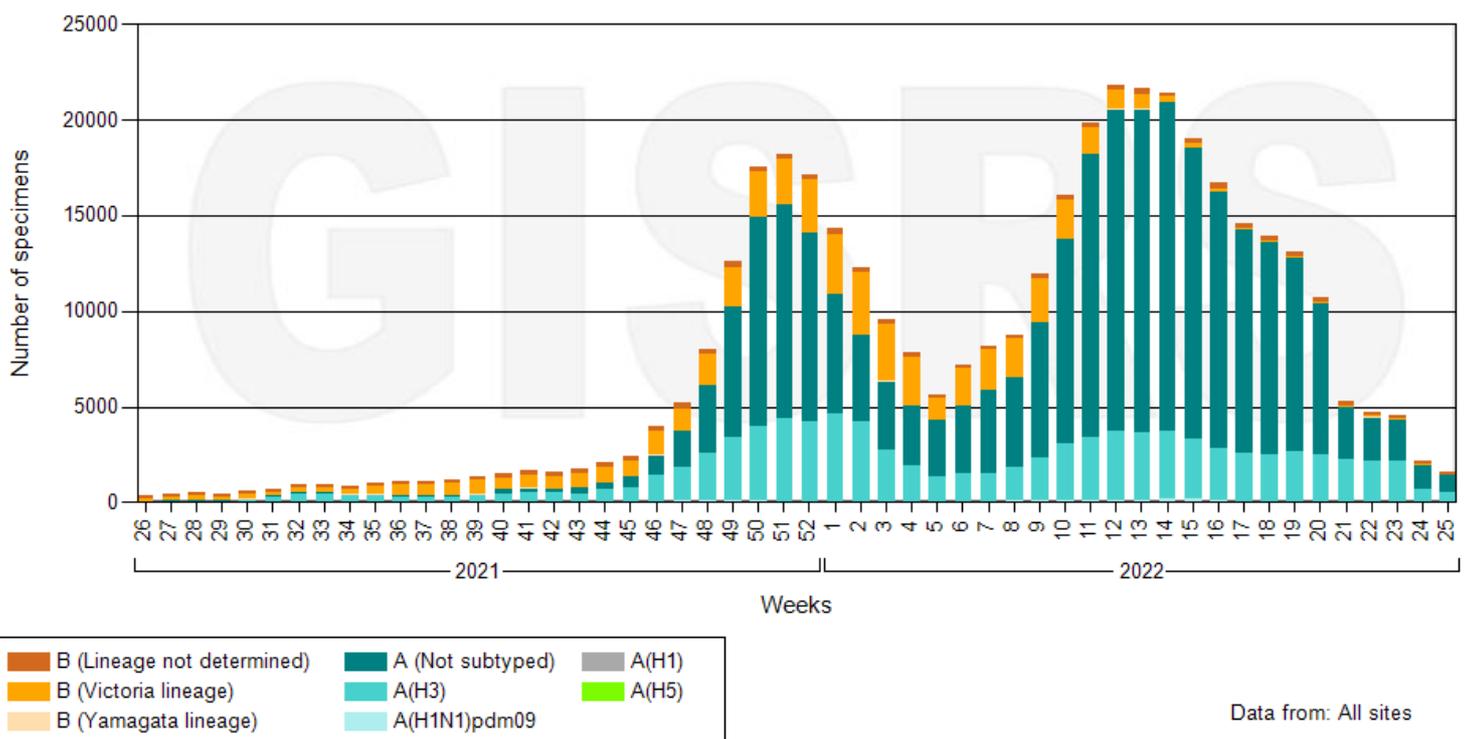
- Many western countries included in this Bulletin reported increasing numbers of cases of **SARS-CoV-2** in June;
- **Australia, Brazil, France, Germany, Israel, Italy, Mexico, Spain and the UK** reported a resurgence in **SARS-CoV-2** cases after months of decline;
- Though an increase in cases was not observed in June, **Japan and the United States** are still experiencing high levels of **SARS-CoV-2** activity;
- The fifth wave reported in South Africa in April has ended.

Implications

We have witnessed the **co-circulation** of **influenza** and **SARS-CoV-2** in many countries during the 2021/22 winter, in contrast to what happened in the 2020/21 winter where only **SARS-CoV-2** circulated. Globally, **influenza** activity has continued much longer than usual, and reached its peak in a second wave in March-April (weeks 12-14) after a first peak in December (see Figure below).

Some countries reported numbers of **influenza** cases per week that are comparable, or even higher than, pre-pandemic levels (e.g. **Brazil, France, the Netherlands, and Australia**), but it will be important to corroborate these numbers with other surveillance indicators as they may simply be a reflection of increased laboratory testing capacities associated with the COVID-19 pandemic. Whereas many Northern Hemisphere countries continued to experience a reduction in **influenza** circulation in June, a rise in **SARS-CoV-2** cases has been observed, possibly due to the emergence of the BA.4 and BA.5 Omicron variants [1] and the relaxation of non-pharmaceutical interventions. The increase in **influenza** cases reported in **Australia and South Africa** that was anticipated in the previous Bulletin continued in June. It will be important to observe if the early increase in **influenza** cases reported in **Australia and South Africa** will continue in July; alternatively, **influenza** activity may continue much longer than usual, as happened in many Northern Hemisphere countries. Finally, despite the emergence of the BA.4 and BA.5 Omicron variants and the recent increase in cases, many countries have reduced **SARS-CoV-2** testing [2] moving from massive to moderate testing and this will have an impact on our ability to track **SARS-CoV-2**, predict epidemic waves and detect new variants.

Number of specimens positive for influenza by subtype



Data from: All sites

Monthly plots by country

The plots per country show weekly data for **influenza** and of **SARS-CoV-2** infections from January 1, 2019 up to June 30, 2022. This Epi-Bulletin includes the countries Canada, United States, Mexico, Brazil, United Kingdom, France, Germany, Italy, Netherlands, Spain, Poland, South Africa, Egypt, China, Japan, South Korea, India, Philippines, Thailand, Vietnam, Israel and Australia. These plots will be updated monthly and distributed through future Epi-Bulletins.

Per country, the top plot displays the number of positive **influenza** (in red) and of **SARS-CoV-2** (in blue) cases. An overview of the absolute number of **influenza** and of **SARS-CoV-2** cases per country can be found on [pages 15-15](#) of this Epi-Bulletin. The bar in the middle displays the Stringency Index (SI; a country-specific composite metric of the mitigation measures that are in place) over time, where light red indicates loose measures and dark red indicates strict measures. The bottom plot displays the percentage of **influenza** (in red) and of **SARS-CoV-2** (in blue) specimen testing positive.

Countries (click to view plot)

North America

Canada
United States

Central America Caribbean

Mexico

Tropical South America

Brazil

Northern Europe

United Kingdom

South West Europe

France
Germany
Italy
Netherlands
Spain

Eastern Europe

Poland

Northern Africa

Egypt

Southern Africa

South Africa

Eastern Asia

China
Japan
South Korea

Southern Asia

India

South East Asia

Philippines
Thailand
Vietnam

Western Asia

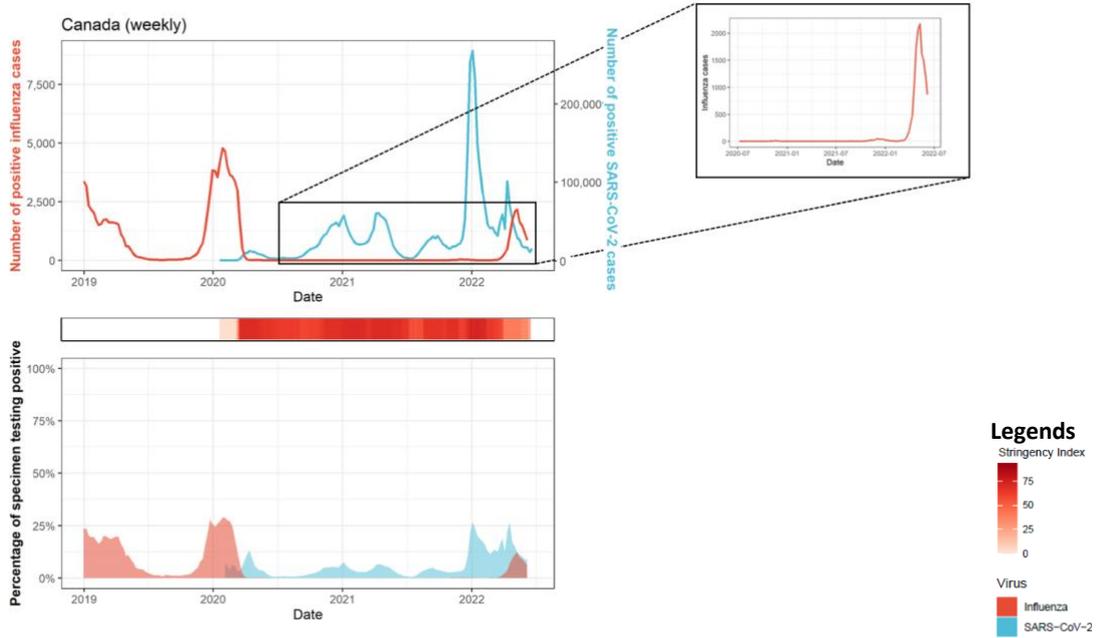
Israel

Oceania

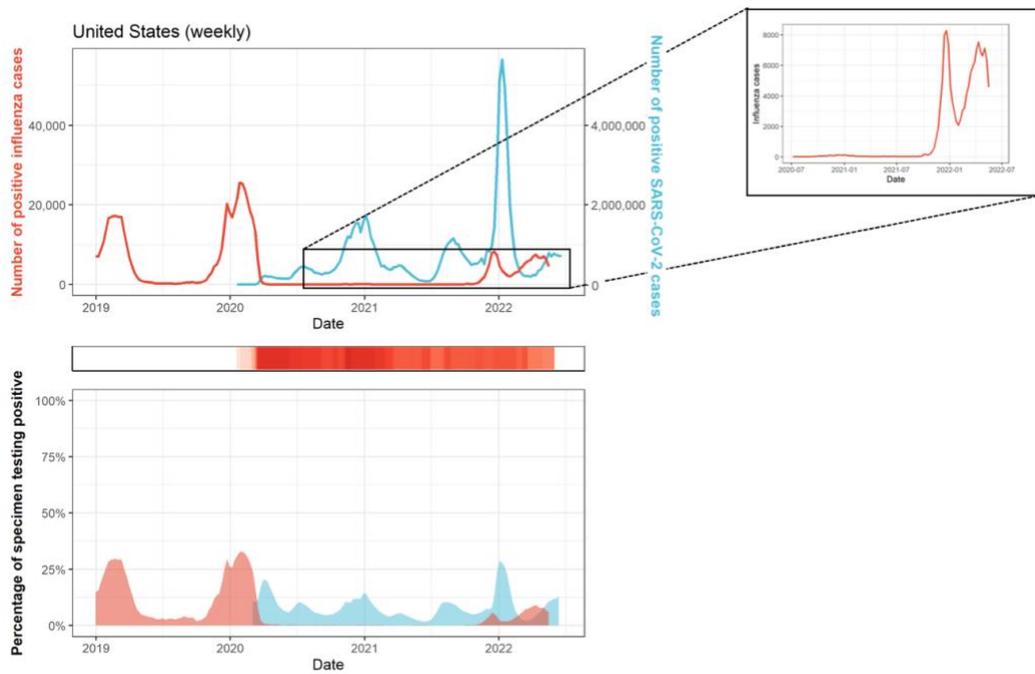
Australia

North America

Canada

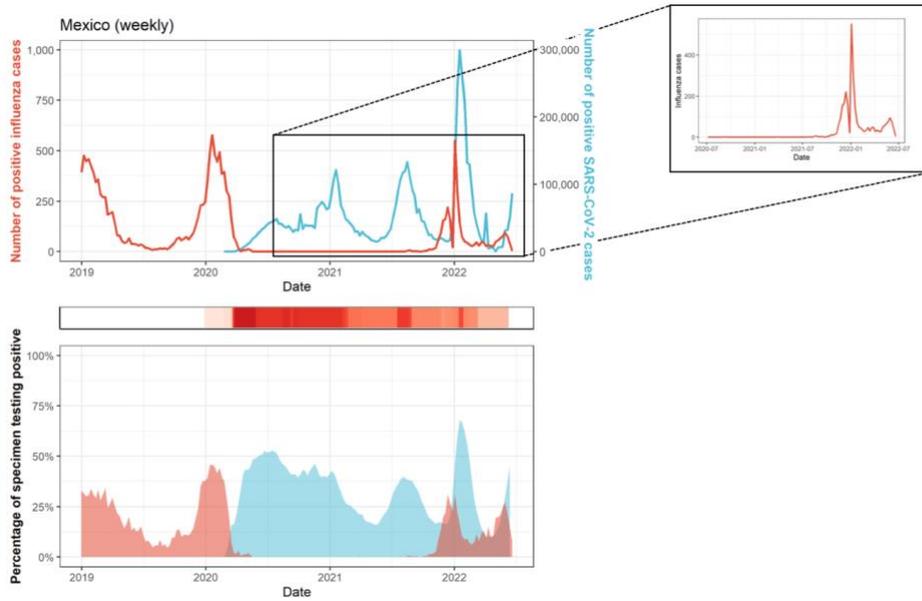


United States



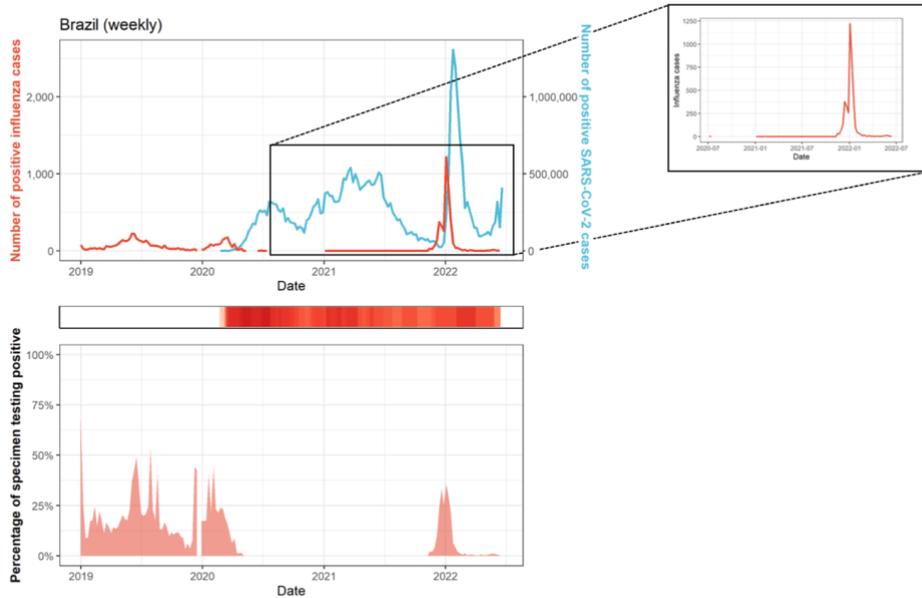
Central America Caribbean

Mexico



Tropical South America

Brazil



Note. Brazil has no positivity rate for SARS-CoV-2 because no denominator was available.

Legends

Stringency Index

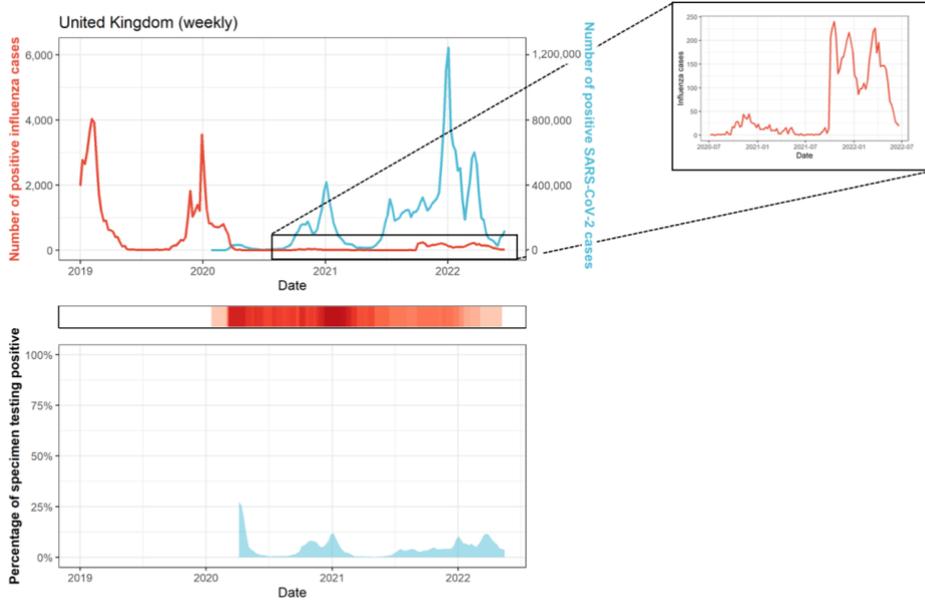
- 75
- 50
- 25
- 0

Virus

- Influenza
- SARS-CoV-2

Northern Europe

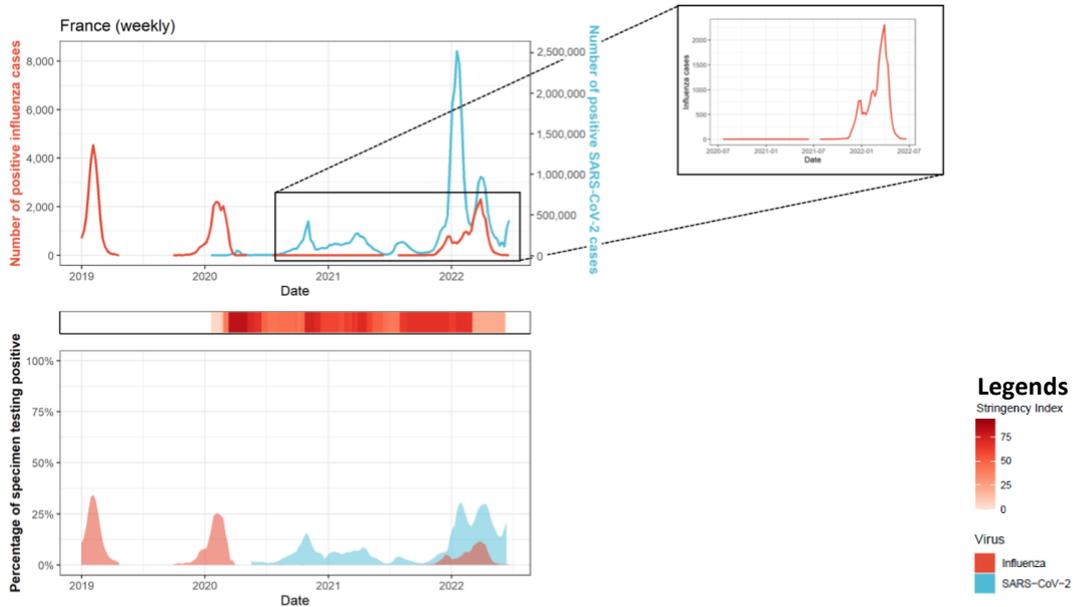
United Kingdom



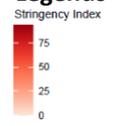
Note. The United Kingdom does not have a positivity rate for influenza because the denominator was deemed unreliable.

South West Europe

France



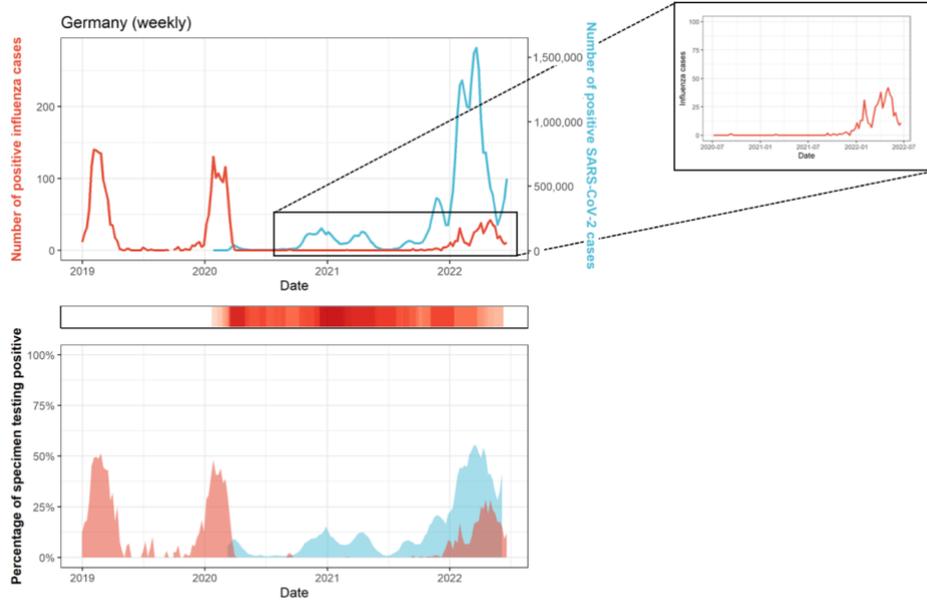
Legends



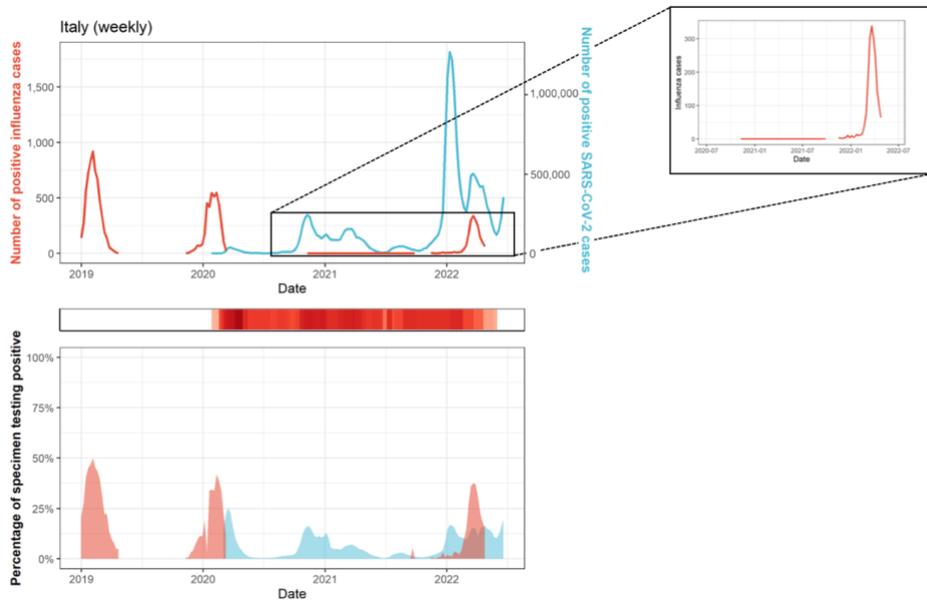
Virus



Germany



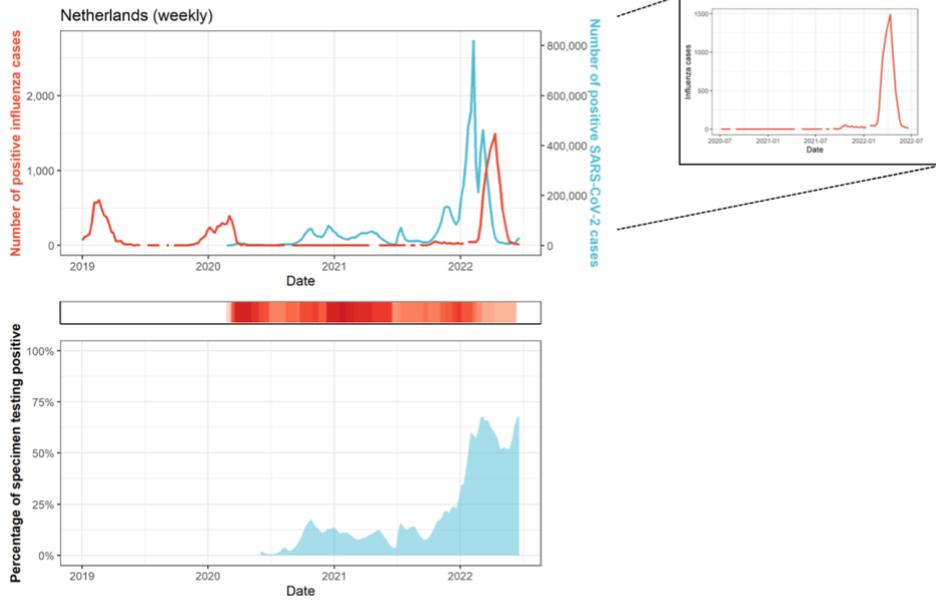
Italy



No influenza data for Italy has been uploaded onto FluNet since week 17, 2022

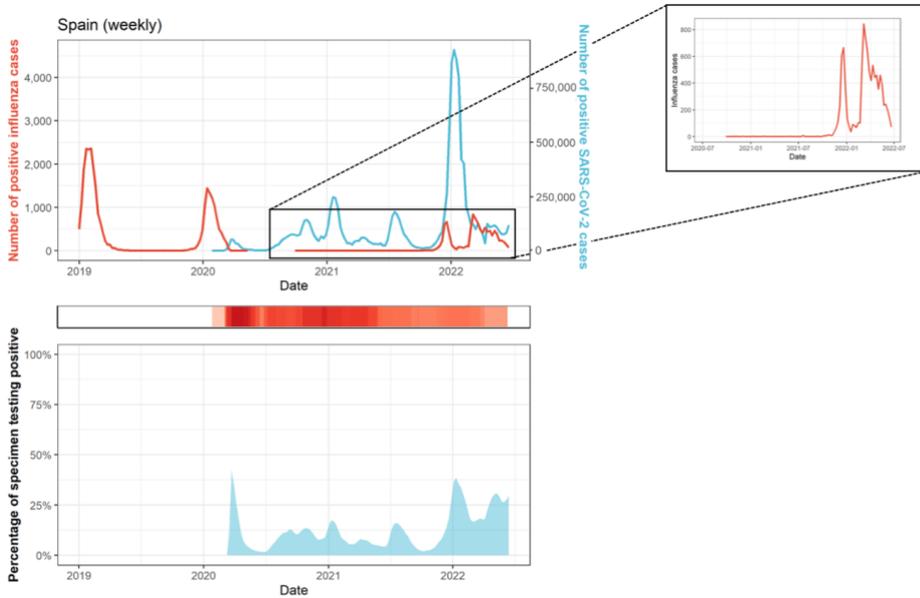
- Legends**
- Stringency Index
 - 75
 - 50
 - 25
 - 0
 - Virus
 - Influenza
 - SARS-CoV-2

Netherlands

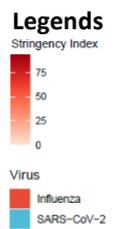


Note. The Netherlands does not have a positivity rate for influenza because the denominator was deemed unreliable.

Spain

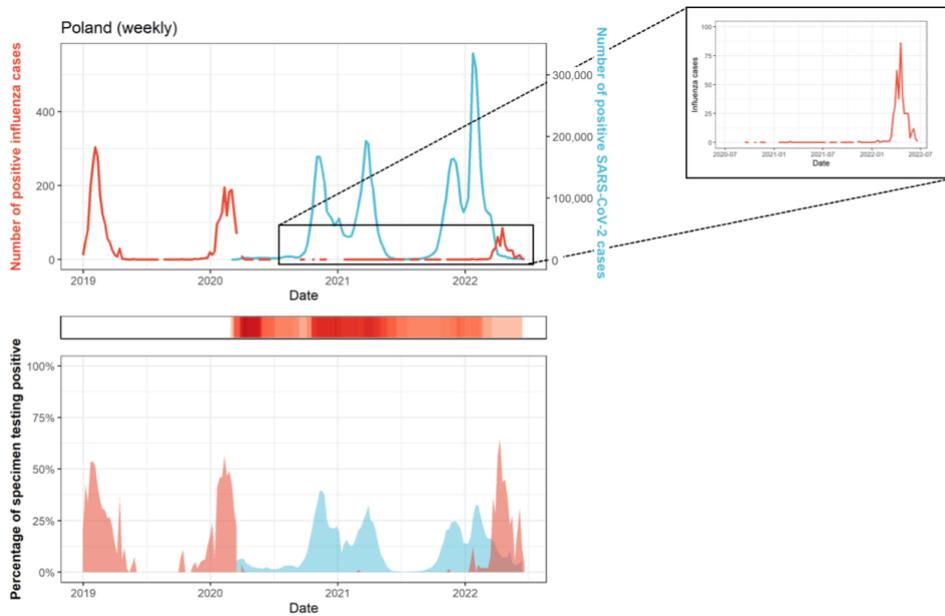


Note. Spain does not have a positivity rate for influenza because the denominator was deemed unreliable.



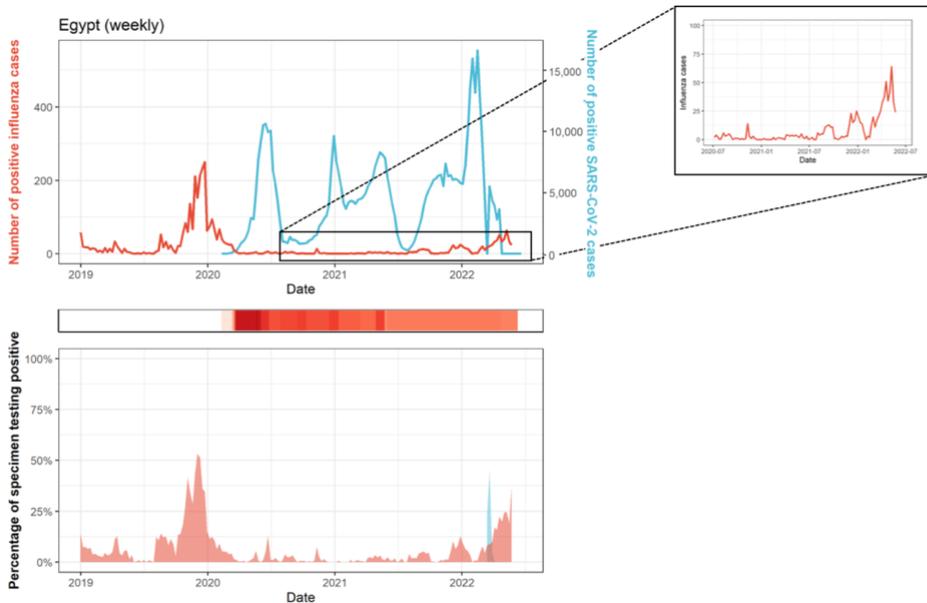
Eastern Europe

Poland



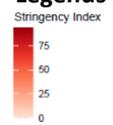
Northern Africa

Egypt



Note. Egypt does not have a positivity rate for SARS-CoV-2 because no denominator was available. No influenza data for Egypt has been uploaded onto FluNet since week 16, 2022

Legends

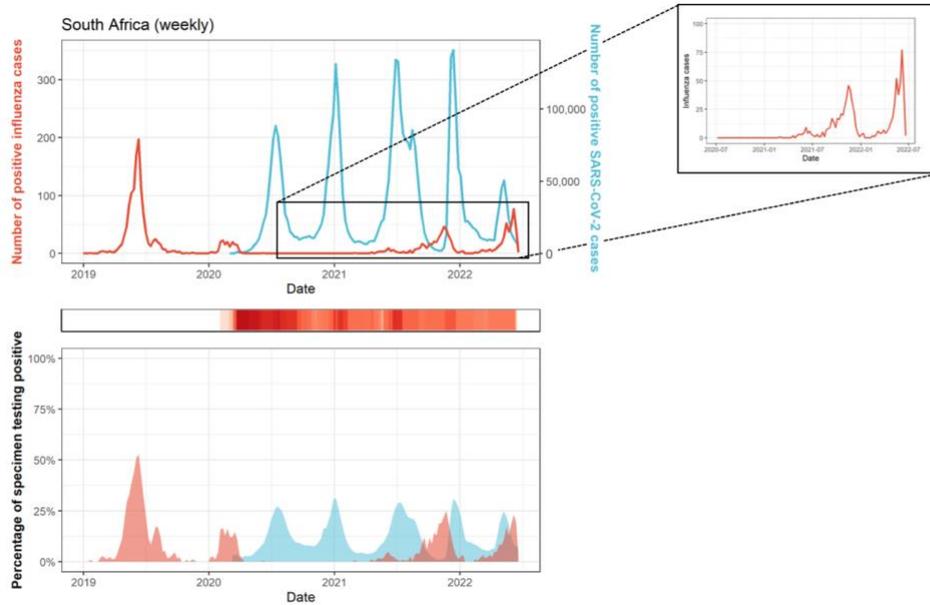


Virus



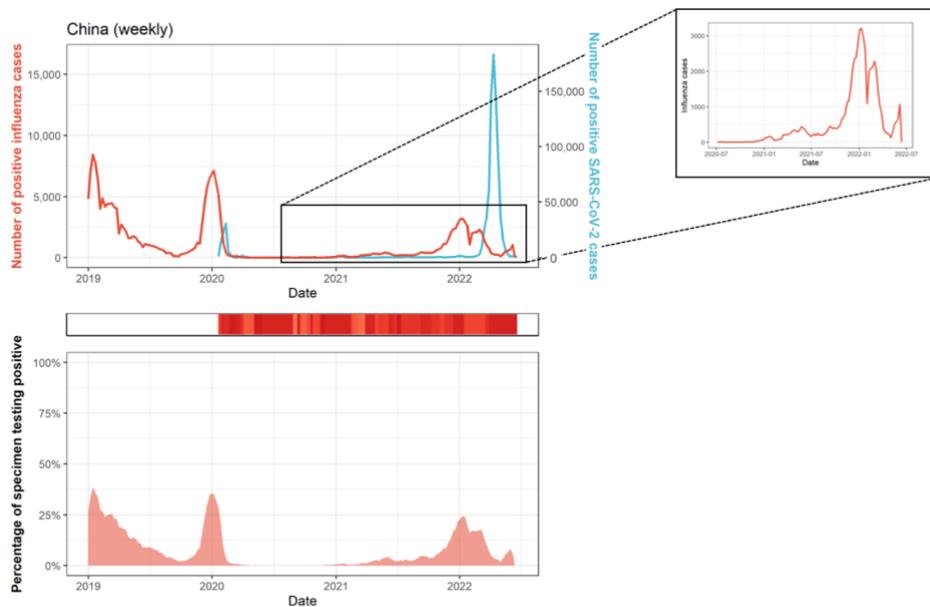
Southern Africa

South Africa

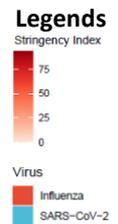


Eastern Asia

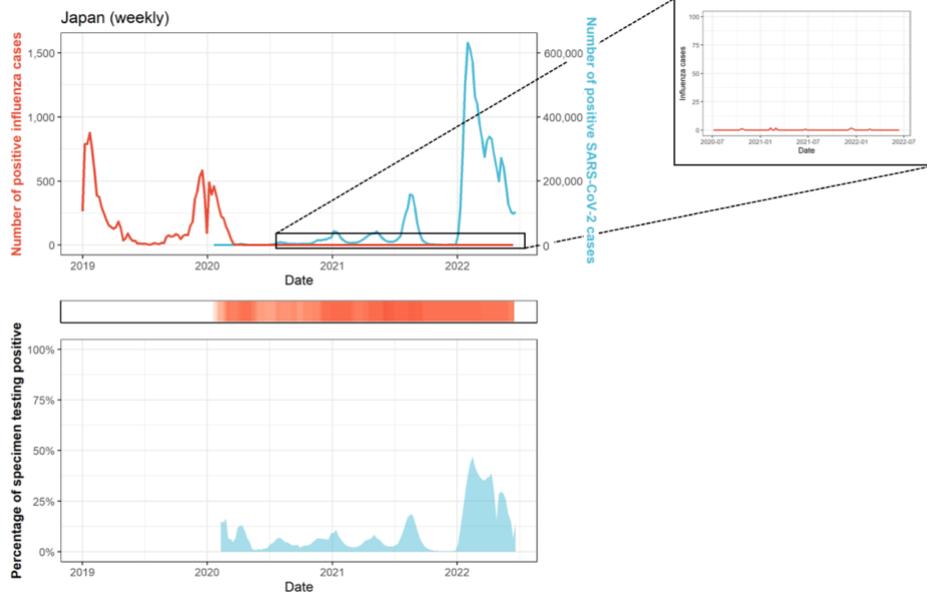
China



Note. China has no positivity rate for SARS-CoV-2 because no denominator was available.

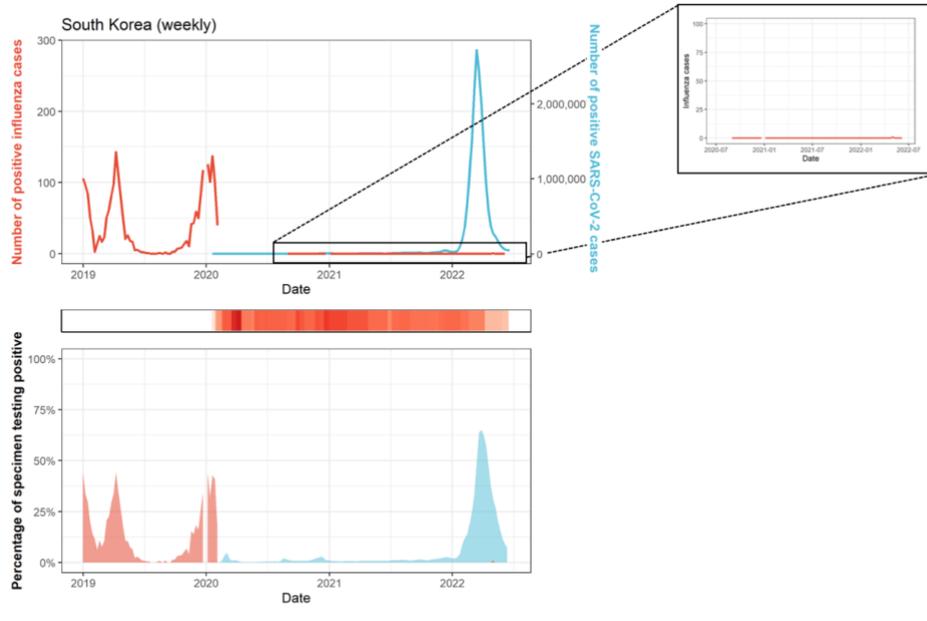


Japan



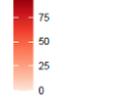
Note. Japan does not have a positivity rate for influenza because the denominator was deemed unreliable.

South Korea



Legends

Stringency Index

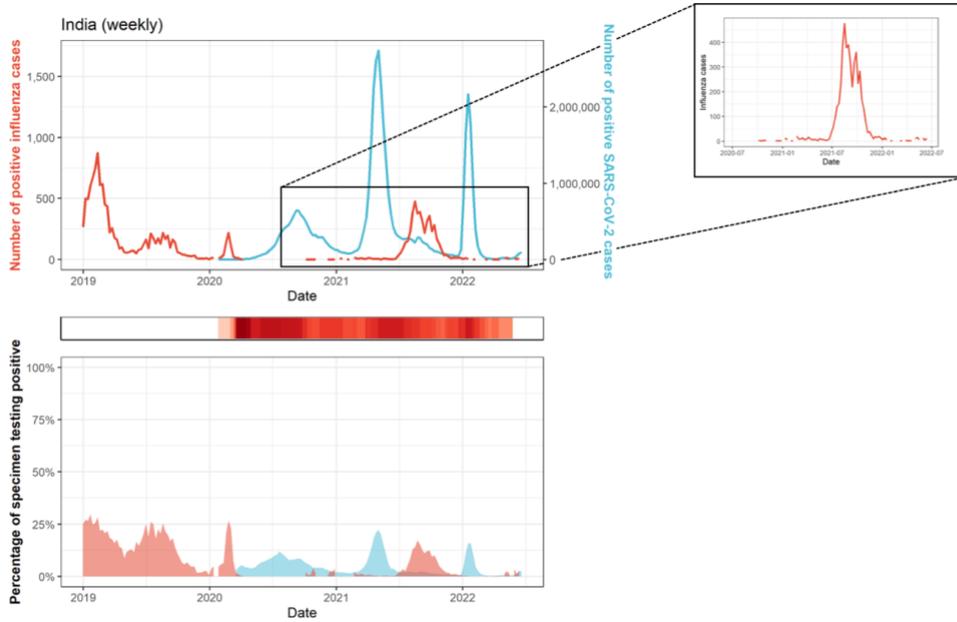


Virus



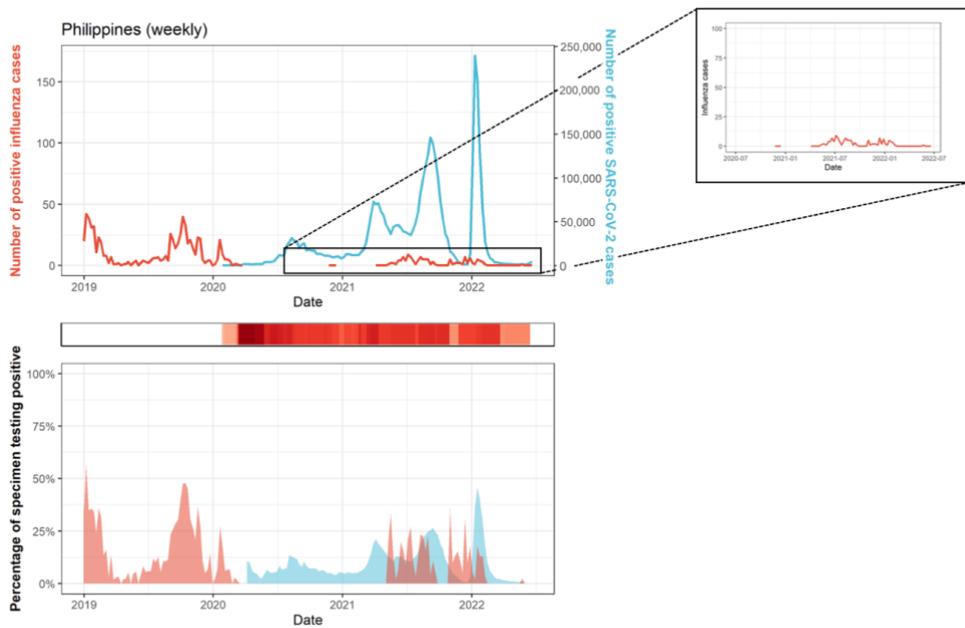
Southern Asia

India

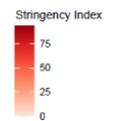


South East Asia

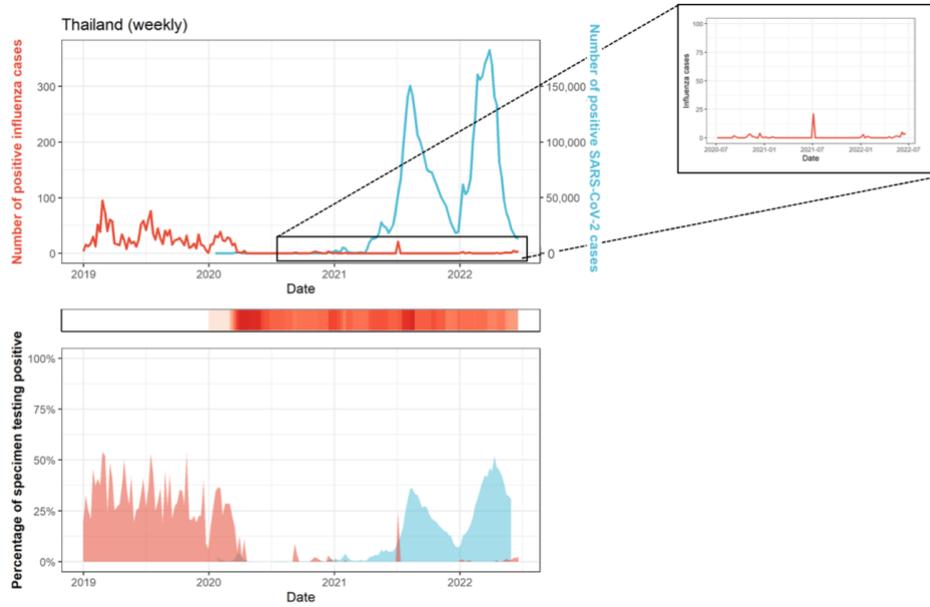
Philippines



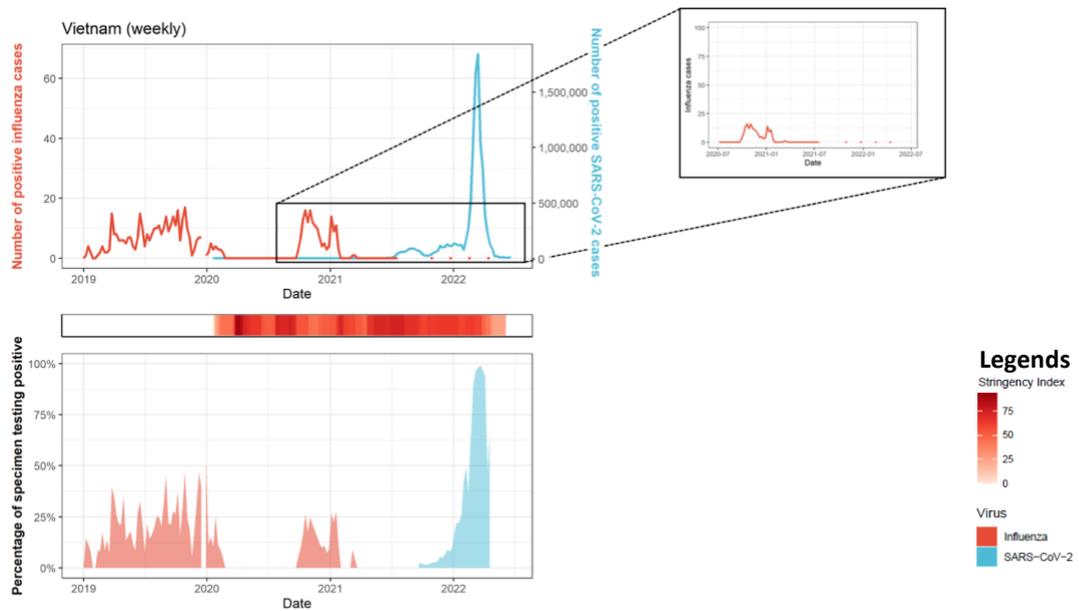
Legends



Thailand

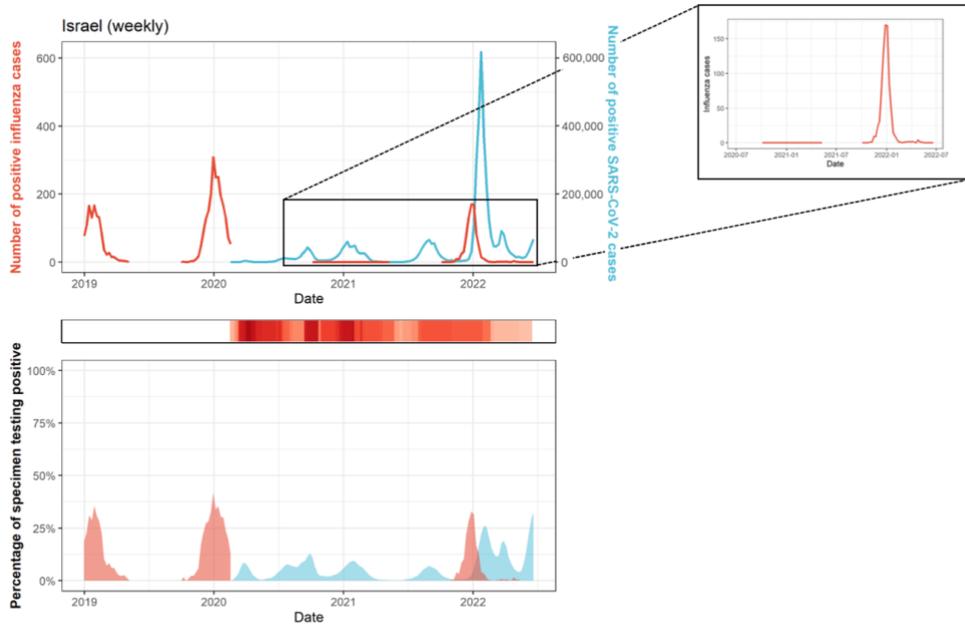


Vietnam



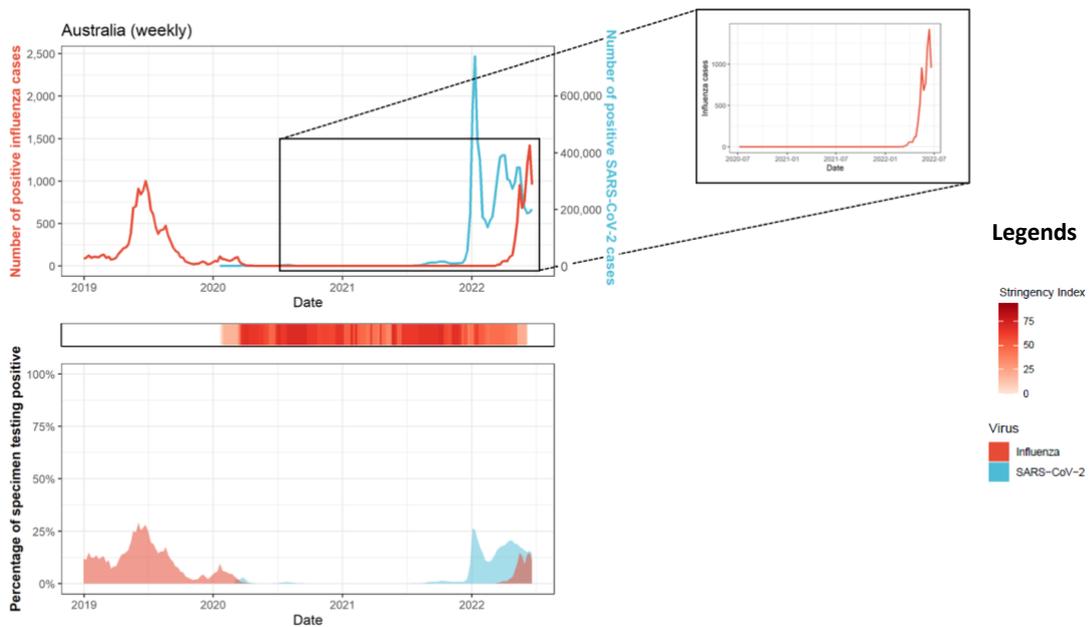
Western Asia

Israel



Oceania

Australia



Absolute numbers per country

Country	Year	Cases ^a of SARS-CoV-2	+/- since last month ^b	Cases ^a of influenza	+/- since last month ^b	Week of last influenza update
Australia	2019			14,002		
Australia	2020	28,425		949		
Australia	2021	397,071		8		
Australia	2022	7,768,607	852,265	7,254	4,336	2022-25
Brazil	2019			3,459		
Brazil	2020	7,700,828		1,391		
Brazil	2021	14,485,929		1,240		
Brazil	2022	10,066,179	1,338,980	2,734	21	2022-25
Canada	2019			43,196		
Canada	2020	590,249		44,956		
Canada	2021	1,633,486		337		
Canada	2022	1,738,586	69,483	13,406	2,083	2022-25
China	2019			122,757		
China	2020	93,153		31,295		
China	2021	21,489		26,183		
China	2022	773,489	4,755	31,222	1,748	2022-24
Egypt	2019			1,999		
Egypt	2020	138,062		659		
Egypt	2021	247,513		233		
Egypt	2022	130,070	0	484	0	2022-21
France	2019			25,405		
France	2020	2,735,590		16,589		
France	2021	7,706,191		3,071		
France	2022	21,156,205	1,570,955	19,418	50	2022-25
Germany	2019			1,215		
Germany	2020	1,719,737		958		
Germany	2021	5,430,685		29		
Germany	2022	21,143,594	1,933,007	531	53	2022-25
India	2019			10,428		
India	2020	10,286,709		655		
India	2021	24,574,870		4,789		
India	2022	8,590,585	291,332	95	28	2022-25
Israel	2019			1,796		
Israel	2020	423,290		1,424		
Israel	2021	961,872		456		
Israel	2022	2,969,101	214,518	348	0	2022-25
Italy	2019			6,361		
Italy	2020	2,107,314		3,599		
Italy	2021	4,018,517		31		
Italy	2022	12,397,428	1,101,701	1,868	0	2022-17
Japan	2019			10,200		
Japan	2020	235,747		2,883		
Japan	2021	1,496,547		9		
Japan	2022	7,584,658	478,207	1	0	2022-24

Country	Year	Cases ^a of SARS-CoV-2	+/- since last month ^b	Cases ^a of influenza	+/- since last month ^b	Week of last influenza update
Mexico	2019			6,963		
Mexico	2020	1,426,094		4,799		
Mexico	2021	2,553,629		960		
Mexico	2022	2,055,279	258,625	2,003	215	2022-25
Netherlands	2019			5,166		
Netherlands	2020	806,620		3,235		
Netherlands	2021	2,346,892		454		
Netherlands	2022	5,041,150	98,440	10,526	96	2022-25
Philippines	2019			612		
Philippines	2020	474,064		52		
Philippines	2021	2,369,926		105		
Philippines	2022	861,062	13,826	17	0	2022-25
Poland	2019			1,786		
Poland	2020	1,294,878		1,282		
Poland	2021	2,813,337		2		
Poland	2022	1,906,777	7,408	398	25	2022-25
South Africa	2019			1,164		
South Africa	2020	1,057,161		157		
South Africa	2021	2,382,539		413		
South Africa	2022	535,158	35,667	375	170	2022-25
South Korea	2019			1,702		
South Korea	2020	61,768		505		
South Korea	2021	573,484		0		
South Korea	2022	17,733,604	249,442	1	0	2022-25
Spain	2019			17,228		
Spain	2020	1,938,671		8,829		
Spain	2021	4,440,910		2,169		
Spain	2022	6,439,293	407,774	7,859	659	2022-25
Thailand	2019			1,568		
Thailand	2020	6,898		297		
Thailand	2021	2,216,551		23		
Thailand	2022	2,301,834	70,249	24	13	2022-25
United Kingdom	2019			42,447		
United Kingdom	2020	2,491,790		14,369		
United Kingdom	2021	10,480,124		2,755		
United Kingdom	2022	8,991,584	423,245	2,957	122	2022-25
United States	2019			268,524		
United States	2020	20,191,300		229,766		
United States	2021	34,644,134		38,453		
United States	2022	32,788,158	3,320,242	96,882	0	2022-20
Vietnam	2019			355		
Vietnam	2020	1,465		146		
Vietnam	2021	1,729,792		39		
Vietnam	2022	9,015,213	27,091	0	0	2022-24

Note. ^a Laboratory-confirmed cases. ^b Influenza cases are reported by FluNet on a weekly basis. To convert these data to months, weekly data are assigned to the month most days in that week belong to. SARS-CoV-2 cases are reported per day and assigned to each month by date.

Methodology

Background

After assessment of alarming levels of spread and severity of SARS-CoV-2 virus, on March 11, 2020 WHO declared COVID-19 a pandemic [3]. The emergence of this new virus has had a major impact on the global circulation of respiratory viruses, including influenza and RSV [4]. The FluCov project aims to understand and communicate the impact of Covid-19 on: i) influenza activity and ii) prevention and control measures (e.g. vaccination) in the coming years.

Scope

The countries included in this Epi-Bulletin are distributed over the Americas (North, Central and Tropical South), Europe (Northern, South West and Eastern), Africa (Northern and Southern), Asia (Eastern, Southern, South East and Western) and Oceania. These data are compared to the prevention and control measures applied in each country using the Stringency Index from the Oxford COVID-19 Government Response Tracker (OxCGRT) [5].

Data sources

- **Influenza:** FluNet [6] is a global web-based tool for influenza virological surveillance first launched in 1997. The virological data entered into FluNet, e.g. number of influenza viruses detected by subtype, are critical for tracking the movement of viruses globally and interpreting the epidemiological data. The data are provided remotely by National Influenza Centres (NICs) of the Global Influenza Surveillance and Response System (GISRS) and other national influenza reference laboratories collaborating actively with GISRS, or are uploaded from WHO regional databases.
- **SARS-CoV-2:** Our World in Data systematically collects COVID-19 data which is presented in their online tool [7]. We used this platform to extract data on the number of cases, as well as tests performed per country. This data is extracted both from the John Hopkins repository on daily confirmed COVID-19 [8] cases as well as various national public health institutions.
- **Government response tracker:** The Oxford COVID-19 Government Response Tracker (OxCGRT) [5] systematically collects information on several different common policy responses that governments have taken to respond to the pandemic on 20 indicators such as school closures and travel restrictions. It now has data from more than 180 countries. OxCGRT data is downloaded directly from the Our World in Data platform.

Extraction details

Data were extracted on 1 July 2022 and cover the period 1 January 2019 to 30 June 2022. Data from both platforms are regularly updated and **sometimes retrospectively corrected**. This might explain any discrepancies between our reported figures and the data published online, even when using data for the exact same period. In case of any unclarities or perceived irregularities, feel free to contact us at flu cov@nivel.nl.

References

- [1] Nature. What Omicron's BA.4 and BA.5 variants mean for the pandemic <https://www.nature.com/articles/d41586-022-01730-y>
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- [3] WHO. Listing of WHO's response to COVID-19. <https://www.who.int/news/item/29-06-2020-covidtimeline> [accessed 1 July 2022].
- [4] WHO. Influenza Update N° 416. <https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update> [accessed 7 April 2022]
- [5] Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford. <https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker> [accessed 16 June 2021]
- [6] WHO. FluNet. <https://www.who.int/tools/flunet> [accessed 15 June 2021]
- [7] Ritchie, H., Ortiz-Ospina, E., Beltekian, D., Mathieu, E., Hasell J., Macdonald B. et al. Coronavirus Pandemic (COVID-19). <https://ourworldindata.org/coronavirus> [accessed 15 June 2021]
- [8] COVID-19 Dashboard, Center for Systems Science and Engineering, Johns Hopkins University. <https://coronavirus.jhu.edu/map.html> [accessed 15 June 2021]

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Project website

<https://www.nivel.nl/en/flucoy>

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